2. THE KANJIRANKULAM BREEDING BIRD SANCTUARY IN THE RAMNAD DISTRICT OF TAMIL NADU

Ramnad District has a rich and varied avifauna, particularly the eastern part of the district with its numerous lakes, ponds and tanks. To mention a few; near Manamadurai is the 'Pasalai Kanmai' (Kanmai = big lake) now divided into two by the Manamadurai-Aruppukottai railway line. Ramnad town has two lakes nearby, the Chakkarakottai Kanmai, where Flamingos can be seen in March, and Periakanmai which looks like an inland sea. These two lakes alone can offer considerable material for a study of the avifauna. This part of District does not have any hills, or forest; but a good portion of it is covered with scrub jungle with its peculiar fauna.

In this paper a brief account is given of a Bird Sanctuary situated in a small hamlet called Kanjirankulam which is about 4 km from Mudukulathur in Ramnad District of Tamil Nadu. It can be reached either by rail and road from Madurai through Paramakudy and Mudukulathur or by road through Aruppukottai, Kamuthi and Mudukulathur. The distance by either route may be about 70 miles. There is no place to stay in the hamlet. There is however an Elementary School, whose teachers offer assistance to visitors.

The history of this little known sanctuary is interesting. About 25 years ago Pelicans and Painted Storks began to be seen in some coastal villages like Cheluvanoor, Komboothi, Pillayarkulam and also at Chitrankudi and Kanjirankulam. The latter two villages are away from the sea but have tanks. Now the birds have disappeared from all the other villages except Kanjirankulam where they were left unmolested by villagers, otherwise the colony would have been decimated long ago. This nesting area was not established by any statute of the State, nor by any Government Department but by the common consent of the villagers of Kanjirankulam. They guard the colony zealously and trespassers are summarily dealt with.

The nesting colony is of about sixty trees. The important species being Ficus religiosa, Thespesia populnea and Acacia arabica. The trees stand on the tank bund and also in the tank bed; the latter are surrounded by water in the rainy season. The ubiquitous Prosopis juliflora is found in abundance making it impossible for the observer to move about. In the biggest banyan trees many nests of pelicans with the young ones can be seen. Many trees have been denuded of slender branches probably by the birds of the colony for use in their nests.

There is constant traffic of birds in the Kanjirankulam area. Some birds arrive at the colony with material for building nests, others may arrive after foraging, with food for their young ones. What may look

like a speck on the horizon may land on the trees as a pelican. The birds go out and return singly or in parties.

The nesting species of the colony are Spotbilled or Brown Pelican, Pelecanus philippensis and Painted Stork Ibis leucocephalus. Besides these one can see the White Ibis, Threskiornis melanocephalus and the Black Ibis, Pseudibis papillosa. These birds nest in trees a mile away from Kanjirankulam. Even from a distance of about two furlongs one can hear the din made by the inhabitants of the colony. Every tree in the sanctuary sags under the weight of a number of nests, holding eggs and growing young chicks. One of the banyan trees has numerous of nests, of pelicans and painted storks. Every branch at different heights presents some tens of nests.

In the same tree on adjacent boughs one can see nests of both species. During my visits I did not see any fight between the birds over territorial rights but pilferage of nesting material occurred with only mild protests by the loser. Every member of the colony was found busy bringing nesting materials or feeding the young ones. This consociation of painted stork and pelicans was also recorded in a valley east of Cuddapah District at the close of the last century by Rev. Howard Campbell. This pelican-painted stork association exists in the small colony of birds at Moontudaippoo near Palayamkottai; and also in Kundakulam in Nangunery Taluk in Tirunelveli District. The pelicans' sociability is shown in their nesting and foraging habits.

Clumsy as the pelican looks, it can soar high; and this can be observed near the colony. It shares this habit with the vultures and the storks.

In this dry zone area the pelican is distributed wherever suitable sheets of water such as large lakes, tanks and coastal lagoons exist. It is common nearer the sea than inland. I have seen pelicans in a lake in Chingleput district fishing in company in a horseshoe formation into which the fish may be driven into a mass so that the participants can take their fill. Pelicans take considerable quantities of fish especially when feeding young and the lessees to whom the fishing rights are sold by Government scare away these birds by shooting them or by explosives, lest these birds come and fish heavily thus depriving the lessees of a good portion of their profit. But at Kanjirankulam such acts are not allowed by the inhabitants of the hamlet.

The Painted Storks are also as numerous as the pelicans in the Sanctuary.

The villagers assure me that the parent birds stand on eastern side of the nest in the forenoon and on western side of the nest in the afternoon to protect their young ones from the sun. This has to be verified during my next visit to the Sanctuary. However, even the casual visitor cannot but notice the way the Painted Stork protects the young ones from the

sun by spreading its broad and long wings over the young ones as a sort of improvised roof.

It is believed that the Painted Stork lays 3-5 eggs. But according to Blandford usually 4 eggs but sometimes as many as 8 eggs are laid. However, as I went about counting the young ones in the various nests there were never more than 4 young chicks. I have watched the young ones clambering among the thorny materials around the nest and among the thorny branches of the acacia trees without being hurt by the thorns. When I visited the Sanctuary last in the fag end of April the water in the neighbouring tanks had dried up and no evidence of existence of water in the neighbourhood could be seen. I was told by the villagers that as there was no source of water within a radius of 10 miles the birds must go to sea coast for their food. This has to be verified. I have been informed that even in hottest period of summer some birds stay in the Sanctuary.

Unlike the villagers of Kundukulam in Nangunery of Tirunelveli District, who propose to destroy the pelican colony because of the noise and bad odour produced by the pelicans and Painted Storks, the villagers in the Kanjirankulam very zealously guard the colony, even to the extent of caring for the young which fall from their nest due to wind or some other cause. The villagers feed these forlorn young with a meal of fish, frogs and snakes which are chopped up for the purpose. I have been told that even the village dogs do not molest these hapless young chicks which slowly grow and finally join their tribe and fly away. The villagers make use of the guano to manure their land. Each villager collects it by turn. The yield of crops is said to double in quantity on the application of the guano.

If the State Government can declare an area within a radius of 10 miles around Kanjirankulam as a 'protected region' where shooting is prohibited, it will be rendering a great service to the birds. Secondly, to make up the deficiency of nesting material for the birds, the Forest Department may consider planting more *Acacia* trees or *Thespesia* trees in and around the sanctuary. I heard that in some of the tanks in other parts of Ramnad District such a scheme is implemented.

Lastly if it is possible, the Government can let some water into the nearest tank during summer so that the birds need not fly about 14 miles each way for water (as the villagers allege).

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3. INTERESTING DISTRIBUTIONAL RECORDS FOR PAKISTAN

It has long been recognised that the outer foothills of north-eastern Pakistan abutting on the Punjab plain represent the westernmost range extension of many interesting endemic Indo-Malaysian plant species characteristic of tropical dry-deciduous forest with a richness of variety quite lacking in any other part of Pakistan (McVean 1962). The Murree foothills, Kahuta and Margalla hills have vegetation typical of this narrow zone (Stewart 1958).

Not unnaturally there are a few mammals and many bird species characteristic of the oriental faunal zone, which enter Pakistan in this region only. Apart from the resident species, many of which are in themselves unique and interesting, there are always occasional or regular avian wanderers which invade westwards from the Siwaliks. I have passed many hundreds of hours of pleasurable bird watching in these hills with always the excitement of seeing a potential rarity and after one such recent visit to the region in early January 1973, feel that it would be useful to record the more interesting records, which are at variance with known distribution as published in S. Dillon Ripley's SYNOPSIS (1961).

- 557. Blossomheaded Parakeet Psittacula cyanocephala. In his account of the birds of Rawalpindi district, Whistler (1938) describes it as an irregularly occurring visitor to the northern Punjab and Salt Range mostly in winter. Having encountered it in April and May in the Murree foothills I had long suspected that a few might stay to breed. On June 6th 1972 I found two occupied nestholes of these parrots in a dead pine tree in the Lehtrar valley at about 4000 feet. The young birds were visible coming to the mouth of the nestholes when the parents arrived with food.
- 788. Bluethroated Barbet Megalaima asiatica. Not specifically included within Pakistan territory in the synopsis. This Barbet was nevertheless recorded by Hugh Whistler (1938)—as